

**Abstract of the Disclosure**

The present invention relates to a new immortalized hepatocyte culture of human (preferably human fetal) normal cell origin, a method of producing said culture, a screening method for a compound or a salt thereof which inhibits or promotes an enzyme activity involved in the metabolism of xenobiotics in the liver, or which inhibits or promotes the expression of a gene encoding an enzyme involved in the metabolism of xenobiotics in the liver, or which inhibits or promotes the induction of expression of a gene encoding an enzyme involved in the metabolism of xenobiotics in the liver, characterized by the use of said culture, a compound which inhibits or promotes an enzyme activity involved in the metabolism of xenobiotics in the liver, a compound which inhibits or promotes the expression of a gene encoding an enzyme involved in the metabolism of xenobiotics in the liver, or a compound which inhibits or promotes the induction of expression of a gene encoding an enzyme involved in the metabolism of xenobiotics in the liver, obtained using said screening method, or salts thereof.

The immortalized hepatocyte culture of human normal cell origin of the present invention is useful in, for example, screening for compounds or salts thereof having therapeutic/preventive effects on hepatic insufficiency .



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特許協力条約に基づいて公開された出願

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| (51) 国際特許分類6<br>C12N 15/09, 5/10, C12Q 1/25, C12P<br>1/00 |                                    | A1  | (11) 国際公開番号<br>WO99/55853<br>(43) 国際公開日<br>1999年11月4日(04.11.99)   |
| (21) 国際出願番号<br>PCT/JP99/02224                             | (22) 国際出願日<br>1999年4月27日(27.04.99) | (30) 優先権データ<br>特願平10/119394<br>1998年4月28日(28.04.98) | JP<br>吉富純枝(YOSHITOMI, Sumie)[JP/JP]<br>〒535-0001 大阪府大阪市旭区太子橋1丁目27番4号 Osaka, (JP)<br>(74) 代理人<br>弁理士 朝比奈忠夫, 外(ASAHINA, Tadao et al.)<br>〒532-0024 大阪府大阪市淀川区十三本町2丁目17番85号<br>武田薬品工業株式会社 大阪工場内 Osaka, (JP)<br>(81) 指定国 AE, AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, ZA, 欧州特許 (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI特許 (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG), ARIPO特許 (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), ヨーラシア特許 (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM)<br>添付公開書類<br>国際調査報告書 |

(54) Title: NOVEL IMMORTALIZED HEPATIC CELL LINE ORIGINATING IN HUMANS

(54) 発明の名称 新規ヒト由来不死化肝細胞株

(57) Abstract

A novel immortalized hepatic cell line originating in normal human (preferably human fetal) cells; a process for producing this cell line; a method for screening compounds or salts thereof capable of inhibiting or promoting the activity of an enzyme participating in the metabolism of a biological foreign matter in the liver, inhibiting or promoting the expression of a gene encoding an enzyme participating in the metabolism of a biological foreign matter in the liver, or inhibiting or promoting the induction of the expression of a gene encoding an enzyme participating in the metabolism of a biological foreign matter in the liver, characterized by using the above-mentioned cell line; and compounds capable of inhibiting or promoting the activity of an enzyme participating in the metabolism of a biological foreign matter in the liver, compounds capable of inhibiting or promoting the expression of a gene encoding an enzyme participating in the metabolism of a biological foreign matter in the liver, compounds capable of inhibiting or promoting the induction of the expression of a gene encoding an enzyme participating in the metabolism of a biological foreign matter in the liver, or salts of these compounds obtained by the above screening method. The above cell line is useful in, for example, screening compounds having preventive/therapeutic effects on liver failure.